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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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18463

9654

7590

08/06/2008

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EXAMINER

PATEL, JAYESH A

ART UNIT

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2624

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/516,086	Applicant(s) KASUTANI ET AL.	
	Examiner JAYESH A. PATEL	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,9-15,19,20,22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) 11,19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-5,9-15,19,20,22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/30/2008 has been entered.

Claim Objections

Claims 5, 15 and 23 are objected to because of the following informalities: The word "and" at line 4 should be replaced with "or". In Claim 14 line 2 "a" should be replaced with "said". In Claim 22 line 2 "a" should be replaced with "said".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4,9-10,12-14 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Shiiyama (US 20030026476) hereafter Shiiyama.

1. Regarding Claim 1, Shiiyama discloses an image description system comprising: a feature extracting unit extracting MPEG-7 Colorlayout color layout features from respective of frames of an image sequence at **(Page 1 Para 0003 and 0012, Page 3 Para 0027-0028, Page 5 Paras 0069 and 0076 where the pluralities of images and their Mpeg-7 color layout features are calculated and extracted)**; and a representative feature calculating unit calculating a representative color layout feature representative of said image sequence from a group of said MPEG-7 Colorlayout color layout features of all flames extracted by said feature extracting unit **(Page 11 Para 0167 where the feature value representing the image i.e. the calculation of the representative image and Page 8 Para 0129-0130 where the representative color of all the blocks in the frames of the images are calculated)**.

2. Regarding Claim 2, Shiiyama discloses the image description system according to claim 1, further comprising: a representative layout feature storage unit storing said representative color layout feature calculated by said representative feature calculating unit at **(Page 4 Para 0050 and Page 8 Para 0121 where the color layout features that representing an image are stored)**.

3. Regarding Claim 3, Shiiyama discloses the image description system according to claim 2, further comprising: layout feature group storage unit storing said group of MPEG-7 colorlayout features calculated by said feature extracting unit at **(Page 4 Para 0050,0055 and Page 8 Para 0121 where the color layout features that representing an image are stored)**. The storage of all the layout features of the blocks and frames of the images constitute the group storage. Shiiyama further disclose on Page 6 Para 0087 the histogram calculation deciding the representative layout color acting as a group (histogram) of pixels.

4. Regarding Claim 4, Shiiyama discloses the image description system according to claim 1, wherein said representative feature calculating unit calculates average values of respective elements **(Page 2 Para 0021-0022 where average color of pixels is obtained)** of a MPEG-7 Colorlayout feature extracted by said feature extracting unit as said representative color layout feature **(Para 0096 where the average value of the colored pixels is calculated and adopted as a representative color layout feature)**.

5. Claim 9 is a computer readable medium claim of claim 1. See the explanation of claim1.

6. Claim 10 is a corresponding method claim of claim 1. See the explanation of

claim1.

7. Regarding Claim 12, Shiiyama discloses an image identification system comprising: a representative layout feature storage unit storing a color layout feature representative of an image sequence as a representative color layout feature at **(Page 4 Para 0050 and Page 8 Para 0121 where the color layout features that representing an image are stored)**; a feature extracting unit extracting MPEG-7 Colorlayout features from respective of frames of a query image **(image of interest is a query image)** sequence **(Page 4 Paras 0058-0060 and Page 5 Para 0069. The image search processing extracts the colorlayout descriptors from the stored images and the query image in the decreasing order of similarity)**; a representative feature calculating unit calculating a representative color layout feature representative of said query image sequence from a group of said MPEG-7 Colorlayout features extracted by said feature extracting unit **(Page 4 Para 0050,0058,0059 and Page 8 Para 0121 where the color layout features that representing an image are stored)**; and an image sequence selecting unit selecting a sequence which resembles said query image sequence by comparing **(decreasing degree of similarity of the images)** said representative color layout feature calculated by said representative feature calculating unit with said representative color layout feature stored in said representative layout feature storage unit **(Page 4 para 0058-0060 where the degree of similarity between image of interest (query**

image) and all the images stored is calculated). Shiiyama discloses the colorlayout descriptors stored of the images in the database and the colorlayout descriptors of the query image are utilized in the image search at para 0058 and 0059.

8. Regarding Claim 13, Shiiyama disclose the image identification system according to claim 12, further comprising: a layout feature group storage unit storing color layout features associated with respective of frames of said image sequence **(Page 4 Para 0050,0055 and Page 8 Para 0121 where the color layout features that representing an image are stored. The storage of all the layout features of the blocks and frames of the images constitute the group storage. Shiiyama further disclose on Page 6 Para 0087 the histogram calculation deciding the representative layout color acting as a group (histogram) of pixels);** and identification unit matching **(Image identification at para 0056)** said group of MPEG-7 colorlayout features extracted by said feature extracting unit against said MPEG-7 Colorlayout features stored in said layout feature group storage unit as to said image sequence selected by said image sequence selecting unit **(display the images based on the search condition at para 0060).**

9. Regarding Claim 14, Shiiyama discloses the image identification system according to claim 12, wherein said representative feature calculating unit

calculates average values of respective elements (**Page 2 Para 0021-0022 where average color of pixels is obtained**) of a MPEG-7 Colorlayout feature extracted by said feature extracting unit as said representative color layout feature (**Para 0096 where the average value of the colored pixels is calculated and adopted as a representative color layout feature**).

10. Regarding Claim 22, Shiiyama disclose the image identification system according to claim 13, wherein said representative feature calculating unit calculates average values of respective elements (**Page 2 Para 0021-0022 where average color of pixels is obtained**) of a MPEG-7 Colorlayout feature extracted by said feature extracting unit as said representative color layout feature (**Para 0096 where the average value of the colored pixels is calculated and adopted as a representative color layout feature**).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiiyama in view of Shiiyama.

11. Regarding Claim 5, Shiiyama discloses the image description system according to claim 1 at **(Page 1 Para 0003 and 0012, Page 3 Para 0027-0028, Page 5 Paras 0069 and 0076 where the pluralities of images and their Mpeg-7 color layout features are calculated and extracted)**. Shiiyama further disclose wherein said representative feature calculating unit rearranges values of respective elements of a MPEG-7 Colorlayout color layout feature extracted by said feature extracting unit in any of ascending order or descending order at **(page 4 para 0059 where the color layout features are stored in the decreasing (descending) order of similarity D in the information database)**. Shiiyama further discloses **calculating the average color** as the representative color of the block (image) at **(page 6 paras 0092 and 0099)**. Shiiyama does not disclose expressly calculating a median as said representative color layout feature.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to calculate median **(average of two middle elements (pixel values) of the block of image containing even numbered elements)**. Applicant has not disclosed that calculating median provides and advantage or solves a stated problem except mathematical calculation. One of ordinary skill in the art would have expected to perform the applicants invention equally well with Shiiyama's apparatus calculating **(average of two middle elements (pixel values) of the block of image containing even numbered elements)** and

hence calculating median. Thus Shiiyama discloses calculating an average of the pixel elements and hence calculating the median.

12. Regarding Claim 15 see the explanation of Claims 12 and 5.

13. Regarding Claim 23 see the explanation of Claims 13 and 5.

Other cited Prior art

Other cited prior art relevant to the claimed subject matter are US- 20020110276, US-6411953 and US- 6963378

.Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAYESH A. PATEL whose telephone number is (571)270-1227. The examiner can normally be reached on M-F 7.00am to 4.30 pm (5-4-9). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

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Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

08/02/08

/Jayesh A Patel/
Examiner, Art Unit 2624

/Jingge Wu/
Supervisory Patent Examiner, Art Unit 2624